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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,372	09/19/2003	Marc Holness	NOR-034 (15632RO)	8497
32836	7590	08/23/2005	EXAMINER	
GUERIN & RODRIGUEZ, LLP 5 MOUNT ROYAL AVENUE MOUNT ROYAL OFFICE PARK MARLBOROUGH, MA 01752			BLOUNT, STEVEN	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,372

Applicant(s)

HOLNESS ET AL.

Examiner

Steven Blount

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/2/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

A. Claim 6 is objected to because of the following informalities: Claim 6 depends upon itself. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 11, 13 - 15, 16 - 18, and 19 - 20 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,594,047 to Ballintine et al.

With regard to claim 10, Ballintine et al teach an optical network for supporting a service (Sonet, see col 4 lines 40+) wherein a dedicated circuit (see the optical channel and its associated supervisory channel discussed in col 4 lines 31+ and also col 3 lines 3+) is used to send messages between endpoints in the circuit. See the performance indication data mentioned in col 3 lines 34+. Ballintine also teaches the use of a service management channel (OSC as discussed above, and see also the first embodiment described in col 1 lines 55+) where the network to network interface 109 in figure 2 carries the supervisory information between networks 100 and 208.

The examiner notes that the phrase "service specific information", as used in these claims, is defined by the applicant on pages 6 – 7 of the specification as "service,

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as used herein, is a guarantee of transport of customer-offered traffic with specific *performance commitments*....Network elements at these service-termination points measure the *performance of the customer-offered traffic* and exchange the *performance metrics* across the network.” The examiner believes that Ballintine et al fairly teach an obvious variation of a “service specific information” according to this definition, as exemplified by the description on col 3 lines 35+ “if there is a need to obtain *performance monitoring*, and/or administration, and/or maintenance information...”. See also col 3 lines 57+ : “the overhead information carried by the digital wrapper can be accessed to obtain accurate client performance information.” See also col 4 lines 19: “Additionally, accurate client performance information is also available at OPEUs 102 and 213.”

With regard to claim 13, see the discussion above relating to the use of service messages.

With regard to claim 16, Sonet is a synchronous service.

With regard to claim 18, see points 102 and 102 in figure 2, both on the same network.

With regard to claim 20, see the rejection of claim 10 above and note the action of OEPU 107 in col 3 line 52.

With regard to claims 14 - 15, see the discussion above and note that members 107 and 204 are commonly known to be edge service /core service switches in this type of arrangement.

With regard to claim 17, see the discussion of different service providers in AAPA.

With regard to claim 19, see the above rejections, including clients 101 and 215 in figure 2.

With regard to claim 11, the information is transmitted as overhead information (see col 3 lines 2+) and note that a byte of the information would be an obvious denomination for such information to be carried in.

3. Claims 1, 2, 3, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,594,047 to Ballintine et al.

With regard to claim 1, AAPA discusses transporting SONET data on page 1 of the specification. AAPA discusses the problem existing in the prior art wherein "a service can traverse the networks of multiple carriers. However, OAM information typically does not transmit across handoff points between network carriers....Another consequence of lack of control points is the inability of service providers to isolate and segment faults adequately for commissioning and reliability purposes" (pages 2 – 3). AAPA does not however teach isolating the faults by sending performance messages across the different networks and assessing and comparing the performance based on the messages of both of the termination points.

Ballintine et al teach the solution to transmitting the said OAM (operations, administration, and management) data between different networks (see members 100 and 208 in figure 2 and note the discussion above) wherein service performance report

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messages having information related to a performance of the service as determined by the service termination point are transmitted over the service management channel OSC as noted above. Ballintine et al also teach sending a "forward defect indicator message" to inform a downstream channel where an optical channel is defective. See col 2, lines 56+. The examiner notes that it is well known to "isolate and segment faults" in areas where there is a high number of bad connections in a network and that this type of data (ie, number of dropped packets) is the type of information which would be commonly carried in the performance messages discussed above between the service endpoints.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have sent service information (such as the number of bad connections) across the disparate (multiple carrier) optical networks of AAPA and compared the results, in light of the teachings of Ballintine et al, in order to provide a useful means for isolating faults in an optical network.

With regard to claim 2 and 5, note that monitoring can occur at member 203 in figure 2.

With regard to claim 3, see the discussion of SLA in AAPA, page 1, paragraph 003.

With regard to claim 8, it would be obvious to transfer a command when repositioning the network as a result of the determination of a fault as mentioned above.

4. Claims 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,594,047 to

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Ballintine et al as applied to claim 1 above, and further in view of U.S. patent 5,768,255 to Brownmiller et al.

With regard to claim 4, AAPA/Ballintine et al teach the invention as discussed above, but do not teach generating the PRM as a scheduled event. Brownmiller et al teach performance monitoring of ends of a network as described in the abstract, and also teach generating messages based on this monitoring as a scheduled event. See col 8 lines 45+. It would have been obvious to one of ordinary skill in the art at the time of the invention to have generated the messages in AAPA/Ballintine et al at regular, scheduled times in light of the teachings of Brownmiller in order to ensure that the system information is made available on a regular basis such that performance can be improved.

With regard to claim 6, see col 9 line 45 (service query).

With regard to claim 7, configuration is mentioned in col 10 lines 1+.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,594,047 to Ballintine et al As applied to claim 8 above, and further in view of U.S. patent 6,731,648 to Cotter.

AAPA/Ballintine et al teach the invention as described above, but do not teach the use of a loopback condition. This is taught in Cotter. See the abstract. Note also the use of a "further acknowledgement signal" in col 6 lines 24+.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,594,047 to Ballintine et al in view of U.S. patent 5,768,530 to Galway et al.

Ballintine et al teach the invention as described with respect to claim 10 above, but do not teach the use of a generic framing procedure client management frame.

The use of a similar frame in a Sonet environment is taught in Galway et al. See col 9, lines 44+.

RESPONSE TO ARGUMENTS

7. Applicants arguments have been considered, but are not deemed to be persuasive. Applicant argues that Ballintine does not teach service specific information related to the performance of a service. For the reasons given in the rejection of claims 10, 11, 13 - 15, 16 - 18, and 19 – 20, the examiner disagrees. See the second paragraph of paragraph 2 above for a discussion.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

SB

8/21/05

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 703-305-0319. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 – 272 - 3071. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ajit Patel
Primary Examiner

SB

2/11/2005